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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,355	06/06/2001	Tomonari Sendai	Q64810	2938

7590 10/12/2006  
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EXAMINER
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SMITH, RUTH S

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 5, 2006 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,9-11,18,19,29,30,32,33,34,44,45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. Wang et al. disclose a method for obtaining a computed, or ratioed, fluorescent light image and assigning color thereto to form a tissue-state (probability of dysplasia) and tissue-form ("contour lines" to highlight areas to be targeted for biopsy) image (0075) (see also fig. 9 and 10 and (0105) regarding fluorescence images conveying additional tissue-form information). Wang et al disclose assigning one of color and brightness to the reflected image and forming an overlaid (inherently matching the number of pixels) fluorescence and reflectance image. With respect to the recitation that the tissue-state image and the tissue-form image are initially separate images, in the absence of any showing of criticality, the intermediate product used to form the composite image would have been an obvious design choice.

Claims 3-6,12-15,20-26,35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al as applied to claims 1,9,18,32 above, and further in view of Kaneko et al. Wang et al do not explicitly address assigning display gradation based on a statistical quantity. In the same field of endeavor, Kaneko et al. teaches that it is known to assign display gradation based on the maximum value and frequency

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(histogram) of the brightness levels of the image signals (col. 17 lines 3-20) to indicate normal or non-normal tissue. Kaneko further discloses using color discrimination scales and LUTS (inherently composed of a plurality of multiplication factors, or coefficients). See col. 16, lines 21-29. Further regarding claims 24 and 39, it is inherent that the computation circuit (141) of Kaneko et al processes data converted from the CCD in the form of 8 bits or less. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to assign the display gradation of Wang et al. based on statistical quantities, or histograms, of the image signals as demonstrated by Kaneko et al. to eliminate artifacts and provide enhanced visual discrimination between normal and diseased tissues and as is known in the art.

Claims 7,16,27,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al as applied to claims 1,9,18,32 above, and further in view of Zeng et al. Wang et al. differ from the claimed invention in that the color data being a chromaticity is not discussed expressly. In the same field of endeavor, Zeng et al. demonstrates that assignment of colors based on a chromaticity system is well known (col. 9 lines 1-28, fig. 5). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to use a chromaticity system as demonstrated by Zeng et al. for assignment of colors in the invention of Wang et al. as is well established in the art.

Claims 31,46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al as applied to claims 18,32 above, and further in view of Hayashi et al. Wang et al. differ from the claimed invention in that a GaN type laser is not specifically addressed for providing UV excitation. In the same field of endeavor, Hayashi et al. discloses that the use of a GaN semiconductor laser for providing excitation between 380-440 nm is inexpensive, has a long lifetime, and high efficiency output (col. 3 lines 26-33 and col. 12 lines 39-45). It would have therefore been obvious at the time the invention was made to a person of ordinary skill in the art to use a GaN laser as taught by Hayashi et al. to provide UV excitation in the invention as taught by Wang et al for the above described reasons.

***Allowable Subject Matter***

Claims 8,17,28,43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

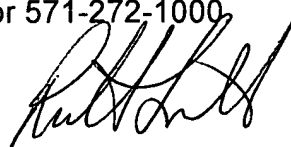
***Response to Arguments***

Applicant's arguments with respect to claims 1-7,9-16,18-27,29-42,44-46 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ruth S. Smith  
Primary Examiner  
Art Unit 3737